CLAIMS:

1. A suction tool for accessing the epicardium of the heart through an incision through the pericardium and into the pericardial space to ablate myocardium tissue comprising:

a suction tool body extending between a suction tool body proximal end and a suction tool body distal end; and

an elongated suction pad extending between a suction pad proximal end and a suction pad distal end, the suction pad proximal end attached to the suction tool body distal end, the suction pad shaped to have a suction cavity adapted to be applied against tissue, the suction cavity defined by an elongated, substantially concave suction cavity wall bounded by a suction cavity rim, a plurality of suction ports extending through the suction cavity wall into the suction cavity, the suction pad distal end shaped with a leader to fit through a pericardial incision and a tissue dilator to be inserted through the pericardial incision to facilitate advancement of the suction pad into the pericardial space, the suction pad comprising one or more ablation electrodes,

the suction tool body further comprising:

a suction lumen extending from a proximal suction fitting adapted to be coupled to a vacuum source and to the plurality of suction ports through which suction is applied to the pericardium to draw a pericardial bleb of the pericardium into the suction cavity when the suction cavity wall is applied against the pericardium and through which suction is applied to the epicardium to draw an myocardial bleb of the myocardium into the suction cavity when the suction pad is inserted through an incision of the pericardium into the suction cavity wall and applied against the epicardium; and

a working lumen extending between a working lumen proximal end opening and an working lumen distal end opening into the suction cavity, the

working lumen adapted to receive an ablation tool having one or more electrodes for ablating for ablating myocardium tissue.

2. The suction tool of Claim 1, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction pad located to provide illumination about the suction pad; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction pad to image the pericardium or epicardium adjacent the suction pad.

3. The suction tool of Claim 1, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction cavity wall located to provide illumination about the suction cavity wall; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction cavity wall to image the pericardium or epicardium adjacent the suction cavity wall.

4. The suction tool of Claim 1, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light

emitting distal end adjacent the tissue dilator to provide illumination about the suction pad distal end; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe adjacent the tissue dilator to image the pericardium or epicardium adjacent the suction pad distal end.

5. The suction tool of Claim 1, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the suction pad; and

means for providing an image of the illuminated pericardium or epicardium adjacent the suction pad.

6. The suction tool of Claim 1, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the suction cavity wall; and

means for providing an image of the illuminated pericardium or epicardium adjacent the suction cavity wall.

7. The suction tool of Claim 1, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the tissue dilator to provide illumination about the suction pad distal end; and

means for providing an image of the illuminated pericardium or epicardium adjacent the tissue dilator to image tissue adjacent the suction pad distal end.

8. A system for accessing the epicardium of the heart through an incision through the pericardium and into the pericardial space to implant cells into the myocardium comprising:

a suction tool comprising:

a suction tool body extending between a suction tool body proximal end and a suction tool body distal end; and

an elongated suction pad extending between a suction pad proximal end and a suction pad distal end, the suction pad proximal end attached to the suction tool body distal end, the suction pad shaped to have a suction cavity adapted to be applied against tissue, the suction cavity defined by an elongated, substantially concave suction cavity wall bounded by a suction cavity rim, a plurality of suction ports extending through the suction cavity wall into the suction cavity, the suction pad distal end shaped to form a tissue dilator to be inserted through an incision made through the pericardium to facilitate advancement of the suction pad into the pericardial space,

the suction tool body further comprising a suction lumen extending from a proximal suction fitting adapted to be coupled to a vacuum source and to the plurality of suction ports suction through which suction is applied to the pericardium to draw a pericardial bleb of the pericardium into the suction cavity when the suction cavity wall is applied against the pericardium and through which suction is applied to the epicardium to draw an myocardial bleb of the myocardium into the suction cavity when the suction pad is inserted through an incision of the pericardium into the suction cavity wall and applied against the epicardium, and a working lumen extending between a working lumen proximal end opening and an working lumen distal end opening into the suction cavity; and

a cutting instrument having a cutting element adapted to be inserted through the working lumen for cutting into the pericardial bleb to form a pericardial incision through which the suction pad can be inserted into the pericardial space,

whereby a catheter for inserting cells into tissue can be inserted through the working lumen to implant cells in the myocardium.

9. The system of Claim 8, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction pad located to provide illumination about the suction pad; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction pad to image the pericardium or epicardium adjacent the suction pad.

10. The system of Claim 8, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction cavity wall located to provide illumination about the suction cavity wall; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction cavity wall to image the pericardium or epicardium adjacent the suction cavity wall.

11. The system of Claim 8, wherein the suction tool further comprises:

a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end adjacent the tissue dilator to provide illumination about the suction pad distal end; and

an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe adjacent the tissue dilator to image the pericardium or epicardium adjacent the suction pad distal end.

12. The system of Claim 8, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the suction pad; and

means for providing an image of the illuminated pericardium or epicardium adjacent the suction pad.

13. The system of Claim 8, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the suction cavity wall; and

means for providing an image of the illuminated pericardium or epicardium adjacent the suction cavity wall.

14. The system of Claim 8, wherein the suction tool further comprises:

means for providing illumination of the pericardium or epicardium adjacent the tissue dilator to provide illumination about the suction pad distal end; and

means for providing an image of the illuminated pericardium or epicardium adjacent the tissue dilator to image tissue adjacent the suction pad distal end.

15. A method of accessing the epicardium of the heart through an incision through the pericardium and into the pericardial space to implant an epicardial cardiac lead comprising:

inserting a suction tool body extending between a suction tool body proximal end and a suction tool body distal end through a pathway in the body to dispose a

suction pad of the suction tool in proximity to the epicardium, the suction pad extending between a suction pad proximal end and a suction pad distal end, the suction pad proximal end attached to the suction tool body distal end, the suction pad shaped to have a suction cavity adapted to be applied against tissue, the suction cavity defined by an elongated, substantially concave suction cavity wall bounded by a suction cavity rim, a plurality of suction ports extending through the suction cavity wall to a suction lumen extending through the suction tool body to the suction tool body proximal end, and a working lumen extending from the suction tool proximal end into the suction cavity;

applying the suction cavity against the pericardium;

applying suction through the suction lumen and the suction ports to the pericardium to draw a pericardial bleb of the pericardium into the suction cavity;

advancing a cutting instrument through the working lumen and cutting through the pericardial bleb to form a pericardial incision;

advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium;

applying suction through the suction lumen and the suction ports to the epicardium to draw an myocardial bleb of the myocardium into the suction cavity;

advancing a cardiac lead having a distal fixation mechanism through the working lumen; and

fixing the distal fixation mechanism to the myocardial bleb.

16. The method of Claim 15, wherein:

the step of applying the suction cavity against the pericardium comprises illuminating the pericardium and imaging the illuminated pericardium to facilitate the application of the suction cavity against the pericardium; and

the step of advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium comprises illuminating the pericardial space and imaging the illuminated pericardial space to facilitate the application of the suction cavity against the epicardium.

17. The method of Claim 15, wherein:

the suction tool inserted in the inserting step comprises a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction pad located to provide illumination about the suction pad, and an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction pad to image the pericardium or epicardium adjacent the suction pad; and

the step of applying the suction cavity against the pericardium comprises illuminating the pericardium through the light conducting pipe and imaging the illuminated pericardium through the image conducting pipe to facilitate the application of the suction cavity against the pericardium; and

the step of advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium comprises illuminating the pericardial space through the light conducting pipe and imaging the illuminated pericardial space through the image conducting pipe to facilitate the application of the suction cavity against the epicardium.

18. The method of Claim 15, wherein:

the step of advancing a cardiac lead having a distal fixation mechanism through the working lumen comprises:

restraining the distal fixation mechanism within a lead installation tool adjacent a tool distal end;

advancing the lead installation tool through the working lumen;

forming a proximal epicardial perforation of the myocardial bleb with the tool distal end;

advancing the tool distal end through the myocardial bleb; and

forming a distal epicardial perforation of the myocardial bleb with the tool distal end; and

the step of fixing the distal fixation mechanism to the myocardial bleb comprises:

releasing the distal fixation mechanism from the tool distal end to bear against the epicardium;

releasing the suction of the epicardium; and

withdrawing the lead installation tool and the suction tool from the cardiac lead.

19. The method of Claim 15, wherein the cardiac lead comprises a lead body bearing a pace/sense electrode and a fixation helix, and the step of fixing the distal fixation mechanism to the myocardial bleb comprises:

rotating the lead body to screw the fixation helix through the epicardium and into the myocardium;

releasing the suction of the epicardium; and

withdrawing the suction tool from the cardiac lead.

20. A method of ablation comprising:

inserting a suction tool body extending between a suction tool body proximal end and a suction tool body distal end through a pathway in the body to dispose a

suction pad of the suction tool in proximity to the epicardium, the suction pad extending between a suction pad proximal end and a suction pad distal end, the suction pad proximal end attached to the suction tool body distal end, the suction pad shaped to have a suction cavity adapted to be applied against tissue, the suction cavity defined by an elongated, substantially concave suction cavity wall bounded by a suction cavity rim, a plurality of suction ports extending through the suction cavity wall to a suction lumen extending through the suction tool body to the suction tool body proximal end, and a working lumen extending from the suction tool proximal end into the suction cavity;

forming a pericardial incision;

advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium;

applying suction through the suction lumen and the suction ports to the epicardium to draw an myocardial bleb of the myocardium into the suction cavity;

advancing an ablation tool through the working lumen; and

ablating the myocardial bleb.

21. The method of Claim 20, wherein the step of advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium comprises illuminating the pericardial space and imaging the illuminated pericardial space to facilitate the application of the suction cavity against the epicardium.

22. The method of Claim 20, wherein:

the suction tool inserted in the inserting step comprises a light conducting pipe extending between a light conducting pipe proximal end adapted to be coupled to a light source outside the patient's body and a light emitting distal end at the suction

pad located to provide illumination about the suction pad, and an image conducting pipe extending between an image conducting pipe proximal end adapted to be coupled to an image capturing camera and image display outside the patient's body and an image conducting pipe at the suction pad to image the pericardium or epicardium adjacent the suction pad; and

the step of advancing the suction pad through the pericardial incision to dispose the suction cavity against the epicardium comprises illuminating the pericardial space through the light conducting pipe and imaging the illuminated pericardial space through the image conducting pipe to facilitate the application of the suction cavity against the epicardium.

23. The method of Claim 20, further comprising:

the step of advancing a cardiac lead having a distal fixation mechanism through the working lumen;

restraining the distal fixation mechanism within a lead installation tool adjacent a tool distal end;

advancing the lead installation tool through the working lumen;

forming a proximal epicardial perforation of the myocardial bleb with the tool distal end;

advancing the tool distal end through the myocardial bleb; and

forming a distal epicardial perforation of the myocardial bleb with the tool distal end; and

the step of fixing the distal fixation mechanism to the myocardial bleb comprises:

releasing the distal fixation mechanism from the tool distal end to bear against the epicardium;

releasing the suction of the epicardium; and

withdrawing the lead installation tool and the suction tool from the cardiac lead.

24. The method of Claim 22, wherein the cardiac lead comprises a lead body bearing a pace/sense electrode and a fixation helix, and the step of fixing the distal fixation mechanism to the myocardial bleb comprises:

rotating the lead body to screw the fixation helix through the epicardium and into the myocardium;

releasing the suction of the epicardium; and

withdrawing the suction tool from the cardiac lead.